



9STATE OF MARYLAND

DHMH

Maryland Department of Health and Mental Hygiene

201 W. Preston Street • Baltimore, Maryland 21201

Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – Joshua M. Sharfstein, M.D., Secretary

October 11, 2013

Public Health & Emergency Preparedness Bulletin: # 2013:40 Reporting for the week ending 10/05/13 (MMWR Week #40)

CURRENT HOMELAND SECURITY THREAT LEVELS

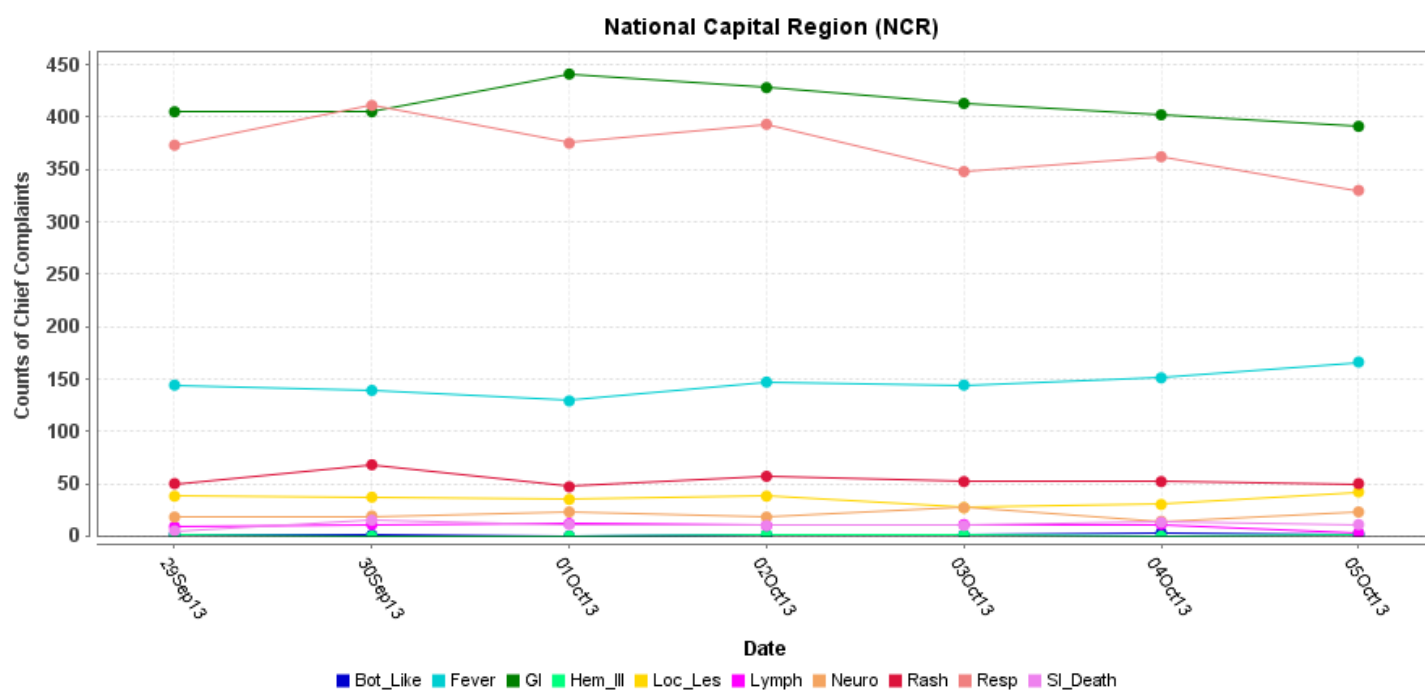
National: No Active Alerts
Maryland: Level Four (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

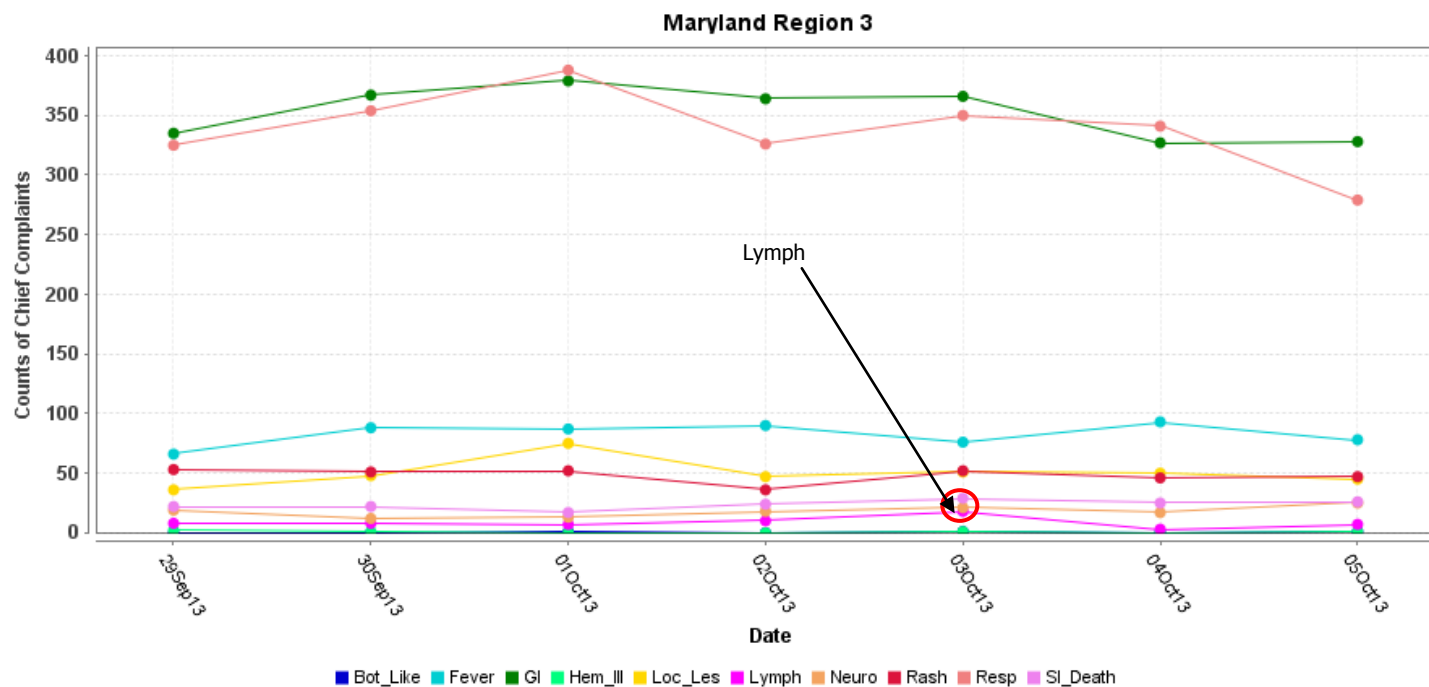
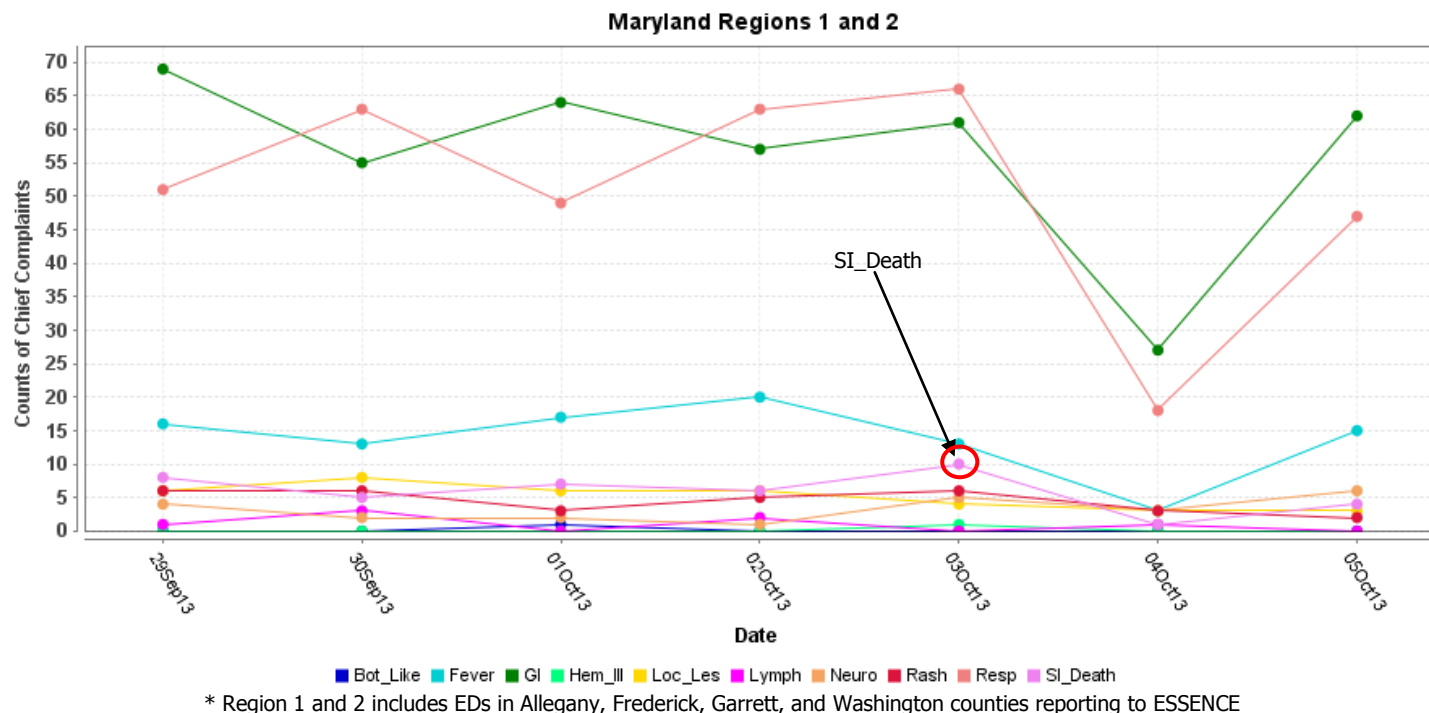
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.

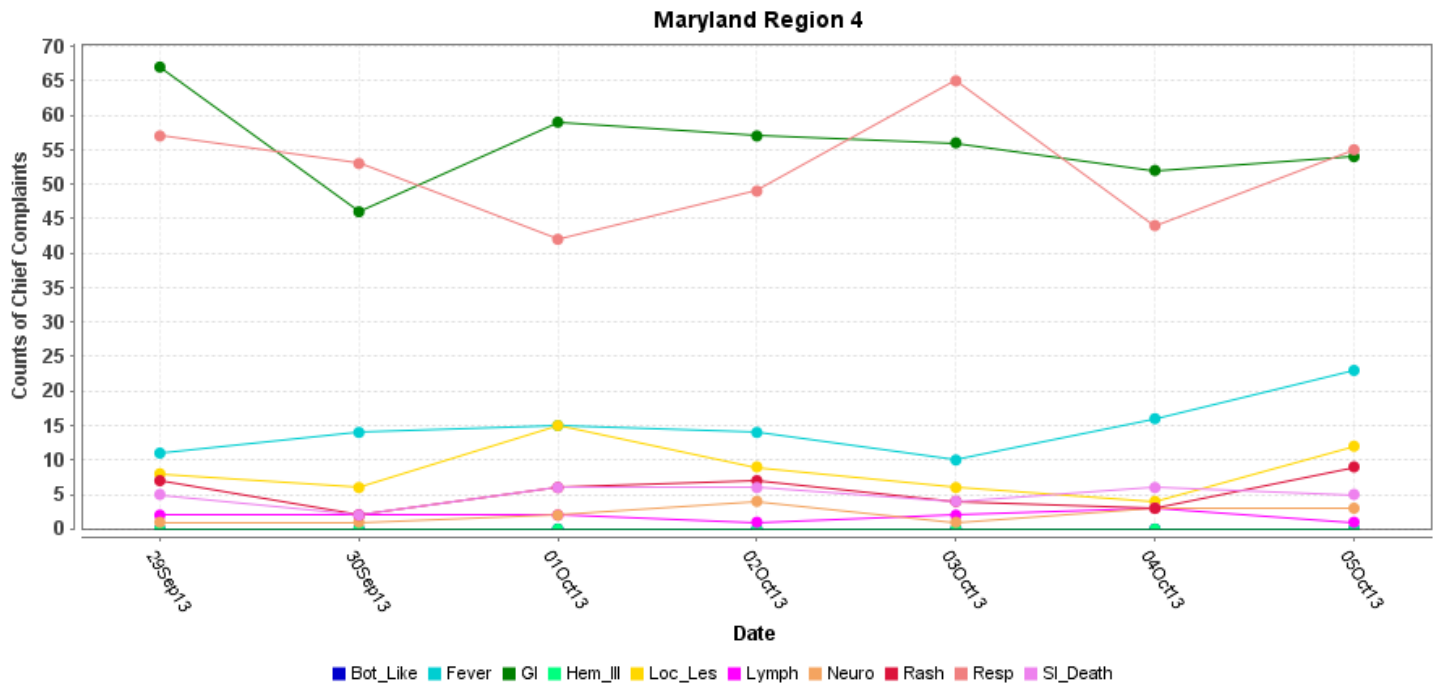
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.



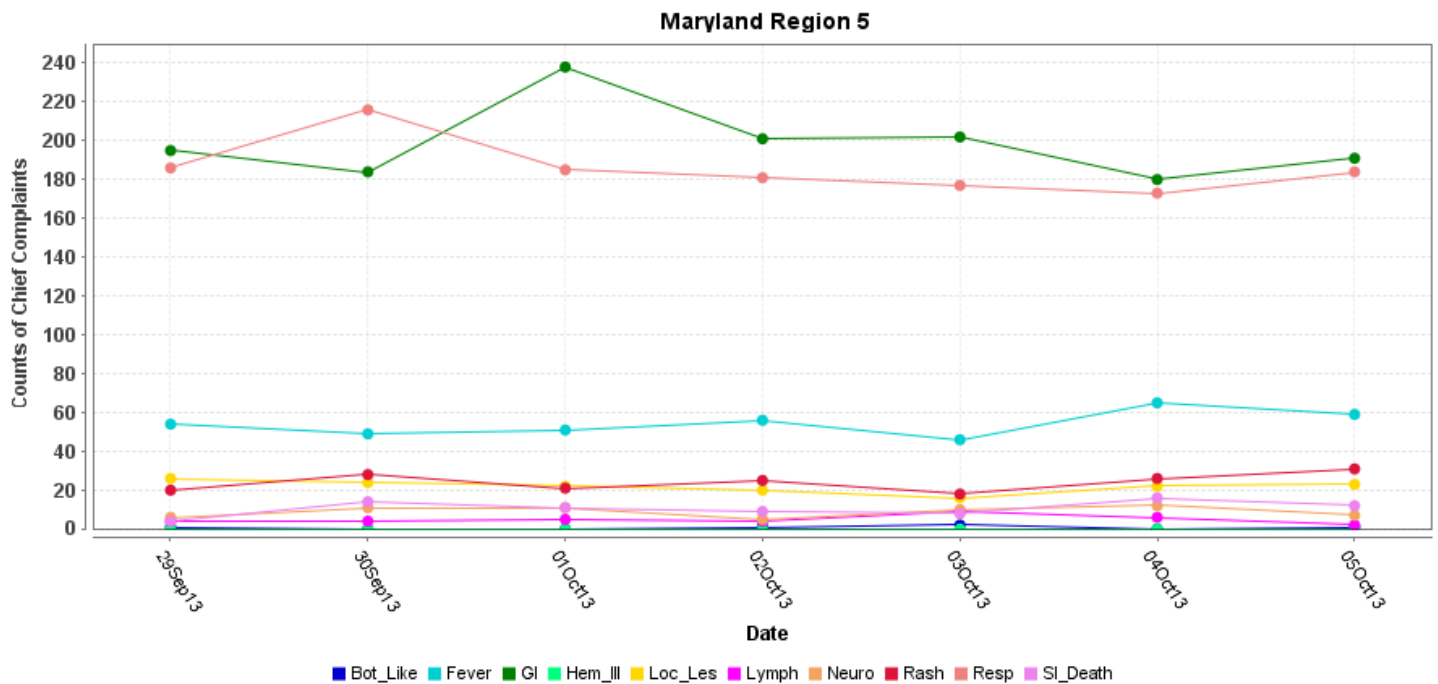
*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

MARYLAND ESSENCE:





* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE

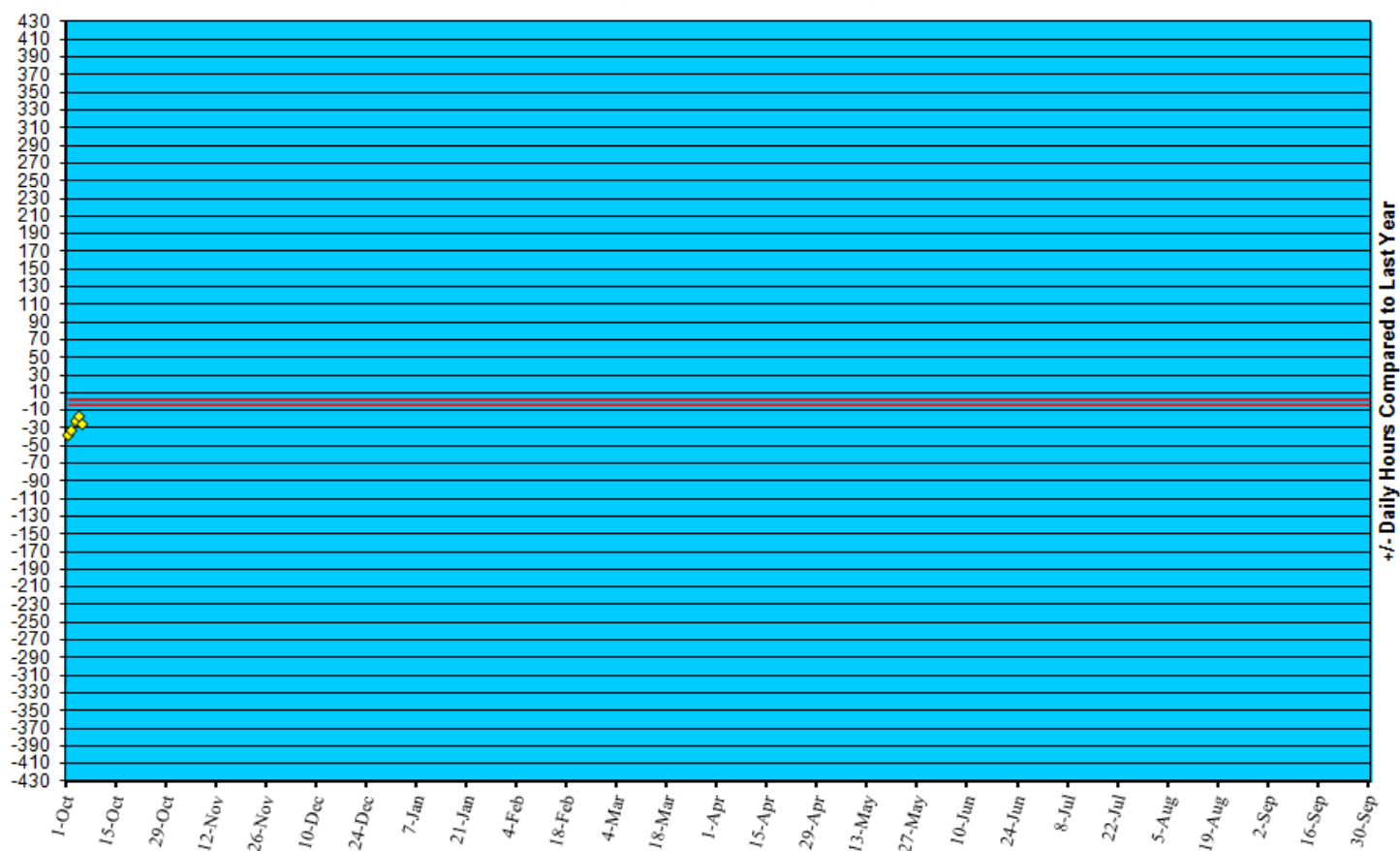


* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/13.

Statewide Yellow Alert Comparison Daily Historical Deviations October 1, '13 to October 5, '13



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in September 2013 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:

New cases (September 29 -October 5, 2013):

Aseptic

7

Meningococcal

0

Prior week (September 22 - September 28, 2013):

7

0

Week#40, 2012 (October 1 – October 7, 2012):

8

0

4 outbreaks were reported to DHMH during MMWR Week 40 (September 29 – October 5, 2013)

1 Gastroenteritis Outbreak

1 outbreak of GASTROENTERITIS in a Nursing Home

1 Respiratory Illness Outbreak

1 outbreak of PNEUMONIA in a Nursing Home

1 Rash Illness Outbreak

1 outbreak of SCABIES in a Nursing Home

1 Other Outbreak

1 outbreak of STREPTOCOCCAL PHARYNGITIS associated with a School

MARYLAND SEASONAL FLU STATUS

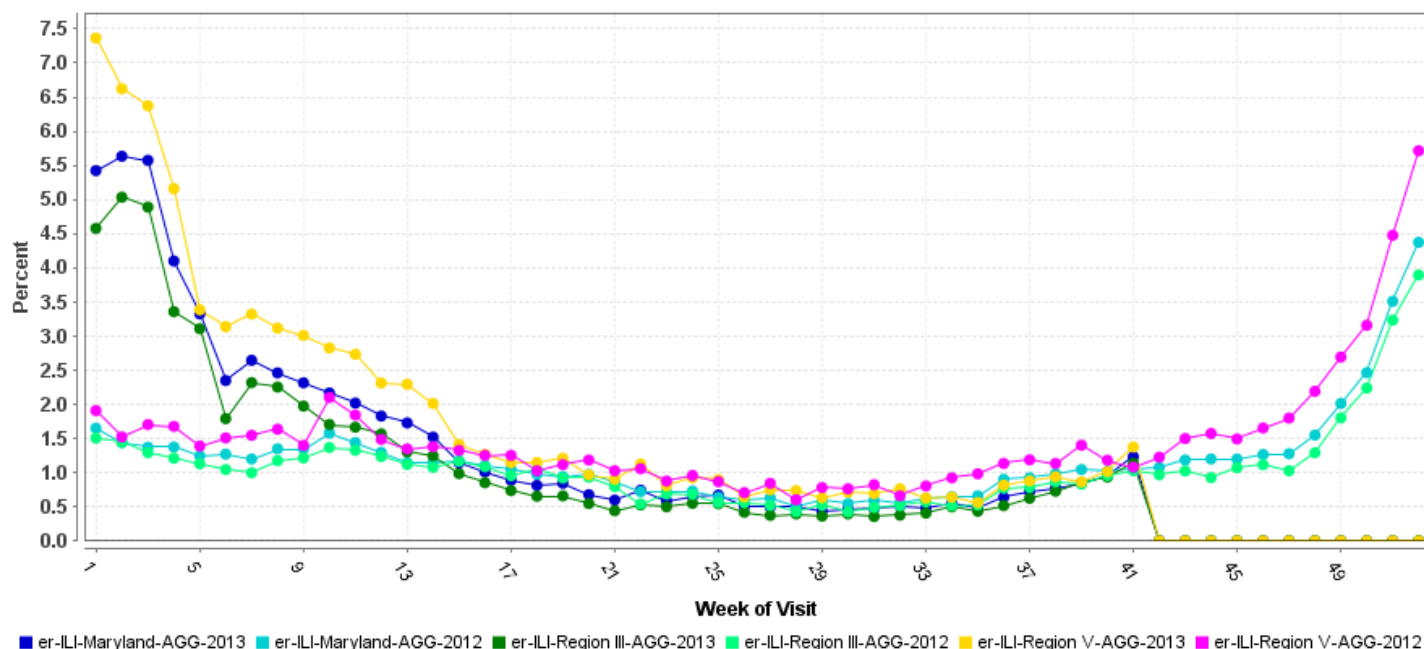
Seasonal Influenza reporting occurs October through May. Seasonal influenza activity for Week 40 was: Sporadic Activity with Minimal Intensity

SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

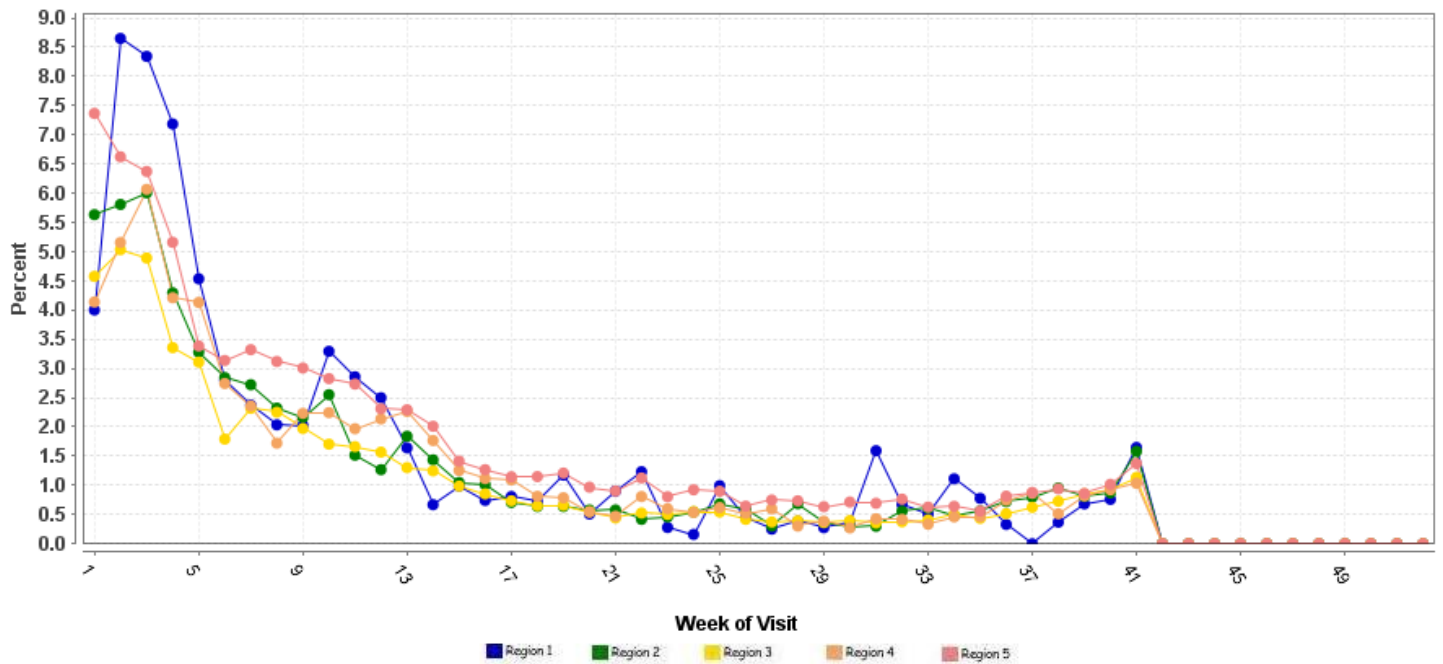
Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.

Weekly Percentage of Visits for ILI



* Includes 2012 and 2013 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total

Weekly Percentage of Visits for ILI

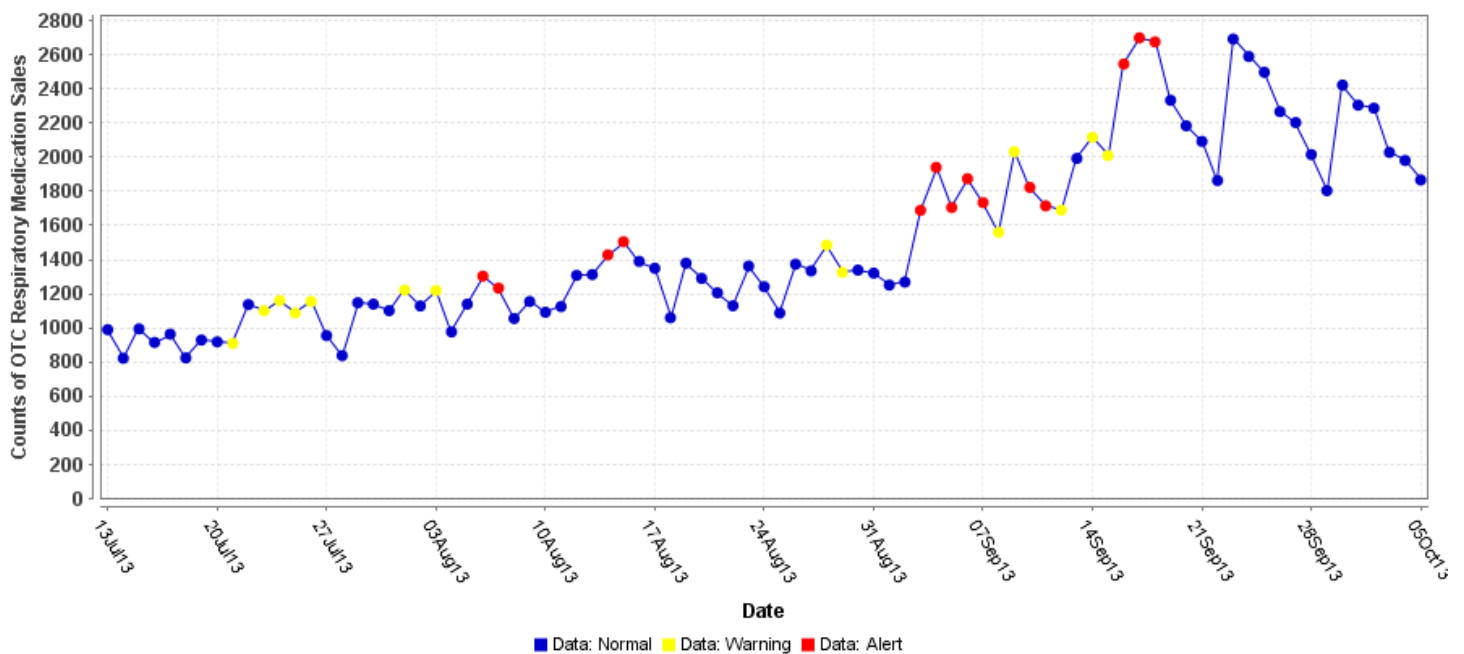


*Includes 2013 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.

OTC Respiratory Medication Sales



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. As yet, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national and global levels, are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of August 29, 2013, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 637, of which 378 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

NATIONAL DISEASE REPORTS*

VIBRIO VULNIFICUS (FLORIDA): 01 October 2013, A Florida man has reportedly died less than 48 hours after being exposed to water bacteria. The 59-year-old died last Mon 23 Sep 2013, being infected with *Vibrio vulnificus*, a bacterium that belongs in the same family as cholera that lives in warm, saltwater water, CBS affiliate WKMG in Orlando, Florida reported. The Florida Department of Health added to WKMG that in 2013 there have been 26 cases of *V. vulnificus* in the state alone, resulting in 9 deaths. The man had been crab fishing in the Halifax River near Ormond Beach, FL. When he woke the next day, his family members told WKMG that he noticed what looked like a bug bite on his leg. Doctors did not take the injury seriously until he started feeling ill, and the wound started "festering." He went to the emergency room on 22 Sep 2013 and passed away the next day. Family members state that the victim perfectly healthy before this incident. *V. vulnificus* usually infects people who eat contaminated seafood or enters the body when an open wound is exposed to water containing the bacteria. Infection can cause vomiting, diarrhea, and abdominal pain. However, if a person has a weakened immune system -- especially people with chronic liver disease -- the bacteria can infect the bloodstream. This can cause a serious illness that involves fever and chills, decreased blood pressure, and blistering skin lesions. *V. vulnificus* bloodstream infections are fatal 50 percent of the time. The Centers for Disease Control and Prevention say that *V. vulnificus* infections are rare, but may be underreported. There were more than 900 reports of the bacteria in the Gulf Coast states between 1988 and 2006. Flagler County Health Department Administrator Patrick Johnson told the Daytona Beach News-Journal that officials are concerned since 2 of the most recent cases happened near the same area. "This is an illness that generally happens when someone eats raw oysters but that's not the case here," Johnson said. "Because the 2 most recent cases are linked to the same area, we wanted to make the public aware." (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS*

MERS-COV (SAUDI ARABIA): 05 October 2013, WHO has been informed of an additional 6 laboratory-confirmed cases of Middle East respiratory syndrome coronavirus (MERS-CoV) infection in Saudi Arabia. The 6 new patients are from Riyadh region with ages from 14 to 79 years old, of which 3 are women and 3 men. The dates of onset of the patients range from 15 to 26 Sep 2013. One patient has mild symptoms while the others are hospitalized. Three patients are contacts of previously confirmed cases with MERS-CoV, 2 are reported to have had no exposure to animals or to a confirmed case, and there is no information on exposure of one patient. Globally, from September 2012 to date, WHO has been informed of a total of 136 laboratory-confirmed cases of infection with MERS-CoV, including 58 deaths. Based on the current situation and available information, WHO encourages all Member States to continue their surveillance for severe acute respiratory infections (SARI) and to carefully review any unusual patterns. Health care providers are advised to maintain vigilance. Recent travellers returning from the Middle East who develop SARI should be tested for MERS-CoV as advised in the current surveillance recommendations. WHO does not advise special screening at points of entry with regard to this event, nor does it currently recommend the application of any travel or trade restrictions. (Emerging Infectious Diseases are listed in Category C on the CDC List of Critical Biological Agents) *Non-suspect case

E. COLI EHEC, O157 (CANADA): 04 October 2013, Burgers made in Toronto for retail sale under Sobey's in-house Compliments brand have been pulled from stores due to 6 cases of illness among Ontario consumers. The Canadian Food Inspection Agency (CFIA) on Wednesday, 2 Oct 2013, issued a health hazard alert asking the public not to eat certain Compliments brand Super 8 Beef Burgers, citing possible contamination with *E. coli* O157:H7. A spokesman for Ontario's health ministry said Thursday, 3 Oct 2013, there have been 6 confirmed cases of illness in that province associated with the beef in question. Of the 6 people, 4 were hospitalized; of the 4, 1 is still in hospital. All are recovering, the ministry said. The burger processor, Belmont Meats, has voluntarily recalled the product, in the wake of what CFIA calls a "recent outbreak investigation." The recall may widen as the food safety investigation at the Belmont plant continues, the agency said. The alert so far is limited to the Compliments Super 8 burgers sold in packages of 6 8-ounce burgers, and covers all best-before dates for that product. The packages display the Belmont facility's "Canada 112" inspection mark and the UPC code 0 55742 37055 3. The burgers in question were distributed in Ontario, New Brunswick, Nova Scotia, Prince Edward Island and Newfoundland and Labrador in Sobey's banner stores, which "might include" Sobey's, Foodland, FreshCo and Price Chopper, CFIA said. The onsets of the 6 cases of illness in Ontario were between 16 Aug 2013 and 15 Sep 2013, provincial ministry said. Nova Scotia's provincial chief public health officer, Dr. David Strang, said in a separate release Thursday, 3 Oct 2013, there have been "no confirmed or suspected" *E. coli* cases so far in that province related to the burgers in question. Food contaminated with O157:H7 may not look or smell spoiled, CFIA said. Strang advised consumers who have the specific product in their fridges or freezers to throw it out. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

CHOLERA (MEXICO): 04 October 2013, Mexican health officials are reporting 3 dozen new cholera cases in Hidalgo state, according to a Pan American Health Organization (PAHO) Epidemiological Alert released 1 Oct 2013. The alert specifies that the International Health Regulations (IHR) National Focal Point of Mexico reported 36 new confirmed cases of autochthonous infection with toxigenic *Vibrio cholerae* O1 Ogawa in the state of Hidalgo. With the additional confirmed cholera cases, the national total is now 46, including 1 death; with 2 of the cases in the Federal District and 44 in the state of Hidalgo. The cases are 24 women and 22 men with ages ranging from 2 to 82 years old. The Mexico health authorities continue to: strengthen epidemiological activities at the national level; ensure the availability of inputs and quality of care in medical units; implement actions to ensure access to drinking water and basic sanitation at the community level; and monitor and check the chlorine levels. According to the Centers for Disease Control and Prevention (CDC), cholera is an acute, diarrheal illness caused by infection of the intestine with the bacterium *Vibrio cholerae*. An estimated 3-5 million cases and over 100 000 deaths occur each year around the world. The infection is often mild or without symptoms, but can sometimes be severe. (Water Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

JAPANESE ENCEPHALITIS AND OTHER (INDIA): 29 September 2013, With the death of 9 children on Thursday [19 Sep 2013], a total of 15 kids have succumbed to encephalitis during the past 3 days here. With this, the toll in the region this year [2013] due to the disease has risen to 271, health officials said. While 6 children died on Tuesday [14 Sep 2013], 9 others succumbed today [19 Sep 2013], they said, adding that the victims belonged to Gorakhpur and its adjoining districts of Kushinagar, Siddharthanagar and Sant Kabirnagar. (Viral Encephalitis is listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

*National and International Disease Reports are retrieved from <http://www.promedmail.org/>.

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.dhmh.maryland.gov/>

Maryland's Resident Influenza Tracking System: <http://dhmh.maryland.gov/flusurvey>

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents

Table: Text-based Syndrome Case Definitions and Associated Category A Conditions

Syndrome	Definition	Category A Condition
Botulism-like	<p>ACUTE condition that may represent exposure to botulinum toxin</p> <p>ACUTE paralytic conditions consistent with botulism: cranial nerve VI (lateral rectus) palsy, ptosis, dilated pupils, decreased gag reflex, media rectus palsy.</p> <p>ACUTE descending motor paralysis (including muscles of respiration)</p> <p>ACUTE symptoms consistent with botulism: diplopia, dry mouth, dysphagia, difficulty focusing to a near point.</p>	Botulism
Hemorrhagic Illness	<p>SPECIFIC diagnosis of any virus that causes viral hemorrhagic fever (VHF): yellow fever, dengue, Rift Valley fever, Crimean-Congo HF, Kyasanur Forest disease, Omsk HF, Hantaan, Junin, Machupo, Lassa, Marburg, Ebola</p> <p>ACUTE condition with multiple organ involvement that may be consistent with exposure to any virus that causes VHF</p> <p>ACUTE blood abnormalities consistent with VHF: leukopenia, neutropenia, thrombocytopenia, decreased clotting factors, albuminuria</p>	VHF
Lymphadenitis	<p>ACUTE regional lymph node swelling and/ or infection (painful bubo- particularly in groin, axilla or neck)</p>	Plague (Bubonic)
Localized Cutaneous Lesion	<p>SPECIFIC diagnosis of localized cutaneous lesion/ ulcer consistent with cutaneous anthrax or tularemia</p> <p>ACUTE localized edema and/ or cutaneous lesion/ vesicle, ulcer, eschar that may be consistent with cutaneous anthrax or tularemia</p> <p>INCLUDES insect bites</p> <p>EXCLUDES any lesion disseminated over the body or generalized rash</p> <p>EXCLUDES diabetic ulcer and ulcer associated with peripheral vascular disease</p>	Anthrax (cutaneous) Tularemia
Gastrointestinal	<p>ACUTE infection of the upper and/ or lower gastrointestinal (GI) tract</p> <p>SPECIFIC diagnosis of acute GI distress such as Salmonella gastroenteritis</p> <p>ACUTE non-specific symptoms of GI distress such as nausea, vomiting, or diarrhea</p> <p>EXCLUDES any chronic conditions such as inflammatory bowel syndrome</p>	Anthrax (gastrointestinal)

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents
(continued from previous page)

Syndrome	Definition	Category A Condition
Respiratory	<p>ACUTE infection of the upper and/ or lower respiratory tract (from the oropharynx to the lungs, includes otitis media)</p> <p>SPECIFIC diagnosis of acute respiratory tract infection (RTI) such as pneumonia due to parainfluenza virus</p> <p>ACUTE non-specific diagnosis of RTI such as sinusitis, pharyngitis, laryngitis</p> <p>ACUTE non-specific symptoms of RTI such as cough, stridor, shortness of breath, throat pain</p> <p>EXCLUDES chronic conditions such as chronic bronchitis, asthma without acute exacerbation, chronic sinusitis, allergic conditions (Note: INCLUDE <i>acute exacerbation</i> of chronic illnesses.)</p>	<p>Anthrax (inhalational)</p> <p>Tularemia</p> <p>Plague (pneumonic)</p>
Neurological	<p>ACUTE neurological infection of the central nervous system (CNS)</p> <p>SPECIFIC diagnosis of acute CNS infection such as pneumococcal meningitis, viral encephalitis</p> <p>ACUTE non-specific diagnosis of CNS infection such as meningitis not otherwise specified (NOS), encephalitis NOS, encephalopathy NOS</p> <p>ACUTE non-specific symptoms of CNS infection such as meningismus, delirium</p> <p>EXCLUDES any chronic, hereditary or degenerative conditions of the CNS such as obstructive hydrocephalus, Parkinson's, Alzheimer's</p>	Not applicable
Rash	<p>ACUTE condition that may present as consistent with smallpox (macules, papules, vesicles predominantly of face/arms/legs)</p> <p>SPECIFIC diagnosis of acute rash such as chicken pox in person > XX years of age (base age cut-off on data interpretation) or smallpox</p> <p>ACUTE non-specific diagnosis of rash compatible with infectious disease, such as viral exanthem</p> <p>EXCLUDES allergic or inflammatory skin conditions such as contact or seborrheic dermatitis, rosacea</p> <p>EXCLUDES rash NOS, rash due to poison ivy, sunburn, and eczema</p>	Smallpox
Specific Infection	<p>ACUTE infection of known cause not covered in other syndrome groups, usually has more generalized symptoms (i.e., not just respiratory or gastrointestinal)</p> <p>INCLUDES septicemia from known bacteria</p> <p>INCLUDES other febrile illnesses such as scarlet fever</p>	Not applicable

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents (continued from previous page)

Syndrome	Definition	Category A Condition
Fever	<p>ACUTE potentially febrile illness of origin not specified</p> <p>INCLUDES fever and septicemia not otherwise specified</p> <p>INCLUDES unspecified viral illness even though unknown if fever is present</p> <p>EXCLUDE entry in this syndrome category if more specific diagnostic code is present allowing same patient visit to be categorized as respiratory, neurological or gastrointestinal illness syndrome</p>	Not applicable
Severe Illness or Death potentially due to infectious disease	<p>ACUTE onset of shock or coma from potentially infectious causes</p> <p>EXCLUDES shock from trauma</p> <p>INCLUDES SUDDEN death, death in emergency room, intrauterine deaths, fetal death, spontaneous abortion, and still births</p> <p>EXCLUDES induced fetal abortions, deaths of unknown cause, and unattended deaths</p>	Not applicable

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CENTERS FOR DISEASE CONTROL AND PREVENTION**

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